

REPORT TO THE TWENTY-THIRD LEGISLATURE

STATE OF HAWAII

2005

**PURSUANT TO ACT 178/05, SECTION 23,
2005 SESSION LAWS HAWAII
REGARDING MATERNAL AND CHILD HEALTH SERVICES
AND CONTRACT SERVICES FOR EARLY IDENTIFICATION
AND HOME VISITING SERVICES TO SUPPORT
HEALTHY START PROGRAM**

**PREPARED BY:
STATE OF HAWAII
DEPARTMENT OF HEALTH
DECEMBER 2005**

Hawai'i's Healthy Start (HHS) began as a demonstration child abuse prevention project in July 1985. Starting at one location on Oahu, a para-professional model was developed to support at-risk families with newborns through home visits. As the model developed, the program expanded to focus on key geographic areas with higher proportions of families with identifying characteristics of risk. Following publication of positive pilot program results, the General Accounting Office issued a report promoting home visiting as a means of preventing child abuse. Early analysis of hospital data indicated that Healthy Start children were less likely to be admitted to the hospital for serious child abuse than non Healthy Start children. Three years after the pilot program results were made public, the U.S. Advisory Board on Child Abuse and Neglect issued a report concluding that home visiting was the most promising strategy for child abuse prevention. HHS has served as the model for the international Healthy Families America (HFA) home visiting program.

During this same time (1986), Congress enacted legislation, the Individual with Disabilities Education Act (IDEA), Part C, to minimize cost and unsatisfactory outcomes for individuals with disabilities by enhancing services and capacity. The Office of Special Education Programs (OSEP) manages national compliance with regulations of IDEA, Part C, (revised in 1997) which is to oversee implementation of an early intervention (EI) service system for children ages birth to three years, and their families. The State opted for a broad definition for eligibility in EI to include environmentally at-risk families as well as families with children who are developmentally disabled, biologically at risk, or medically fragile. As a result of this IDEA, Part C designation, Healthy Start programs were required to move away from a purely child abuse prevention model to a more child development focused model. By 2001, HHS had rapidly expanded to a statewide program with increased mandates to comply with OSEP. Since then, HHS has responded to multiple research evaluative studies (see Attachment 5) in order to ensure effective and appropriate services and outcomes to HS families. OSEP mandates as well as the need for increased training for home visitors in response to changing profiles of families have necessitated a closer look at the program's current model.

Currently, each home visit is structured around: 1) Sharing of information about child development (including a safe and healthy home), 2) Addressing parenting skills and problem solving techniques emphasizing positive parenting, and 3) Encouraging support in seeking professional treatment for substance abuse, maternal depression, and domestic violence which place the child at risk for neglect and/or abuse.

Families are treated as partners who are encouraged to identify and work on specific goals via an Individualized Family Support Plan (IFSP). Services are voluntary and as family functioning improves, intensity and frequency of service is modified (decreased) in support of increasing family resiliency. Direct services provided in the natural environment of the home include scheduled developmental screening for possible delays with subsequent referral to EI services through HDOH Early Intervention Section (EIS) as necessary. Other services involve providing informed support and advocacy for families as well as linkage with community resources, including a medical home for the child, and specialists in the areas of child development and family functioning.

In an on-going effort to address model efficacy, the DOH committed to a long-standing relationship with Johns Hopkins University (JHU) to conduct research evaluation. In the mid-1990's, JHU initiated an experimental study of HHS process and outcomes.

Prior to the JHU studies, HHS contract monitoring and on-going program evaluations had indicated that all outcome measures were being met. However the JHU evaluation findings indicated that inconsistent program implementation was a concern and that contractors had deviated away from the program model. The report also determined that retention rates were similar to rates from a decade ago, were somewhat lower than rates of other home visiting programs, and varied enormously among HHS sites. Therefore quality assurance efforts were focused on improving fidelity to the model; i.e., frequency of home visits, addressing risk factors, outreach and engagement. Para-professional home visitors were asked to identify successful techniques used toward positive outcomes and HHS quality assurance measures were added to the data tracking system as well as instituting changes to the training curriculum for contracted providers. Although rates for some sites did improve, the policy changes may not have had the

impact as intended due to the change in profile of families served; i.e.; organizational changes Temporary Assistance to Needy Families (TANF) requiring families to return to work sooner; and changes in the contract agencies which led to disruption of services; as well as other organizational changes which may have impacted retention rates.

HHS efforts to respond to organizational and societal changes are evidenced by a comparison between the original HHS model which was staffed by 1 Master's prepared supervisor for 5 Home Visitors, and today's model which includes a Child Development Specialist and a Clinical Specialist . HHS has also included an "Enhanced HS" which additionally consists of a nurse or substance abuse counselor. On-going developmental screenings, referrals for more comprehensive developmental evaluations, development of an Individual Family Support Plan (IFSP), and case management for these concerns are added responsibilities for para-professional home visitors.

In 2004, JHU was awarded a competitive Center for Disease Control and Prevention (CDC) training grant to develop an effective model for improving home visiting outcomes and to build on activities now underway by assessing home visitor skills directly and to generate timely staff member specific profiles of performance relative to standards and norms over the next four years. The objective is to assess the effectiveness of an enhanced implementation system for operationalizing a widely disseminated paraprofessional model of home visiting to prevent child abuse and neglect in at-risk families of newborns, in 1) reducing malleable family risks for child maltreatment; 2) preventing child abuse and neglect; and 3) promoting child health and development from birth to 2 years.

Most recently, Senate Concurrent Resolution No. 227, S.D.1, H.D.1 was adopted by the Senate and the House of Representatives of the Twenty-Third Legislature of the State of Hawaii, Regular Session of 2005, creating a planning Task Force for the Healthy Start program to restructure the program for greater effectiveness. This HHS Advisory Task Force has been charged with a number of specific activities, including but not limited to strengthening the program focus, reducing program complexity, restructuring intensity of services and contract goals, reallocation of resources, and identifying evidence-based practice to enhance overall program effectiveness. Historically, HHS has

consistently sought and responded to research and evaluative findings in a continuous effort to address on-going program services issues.

This Report as requested in Section 23 of Act 178/05 addresses the six specified areas related to delivery of home visiting services and includes findings and recommendations for overall program restructuring. Many of the issues addressed in Act 178/05 are similar to the issues being addressed by the HHS Advisory Task Force.

Engagement and Retention (1)

Rates of engagement and retention vary according to the point from which duration of service is measured. Depending on what point is chosen for the denominator, rates can and do vary as does the size of the population included. For example engagement may be tracked from point of referral into a home visiting program after hospital based screening; or it may be deemed enrolled only after a family is visited by a home visitor and agrees to continued services.

Of the 2,117 families with newborns accepting referral to home visiting, 97% (n=2,057) were newly enrolled and 86% (n=1,766) were initially admitted within 2 days of referral. These families account for 40% of unduplicated families who are active in the program(n=4,404). That indicates 60% were continuing with service. Families with only one child active with the program account for 76% (n=1,862) of unduplicated total active families.

Findings

Various points in time, according to service delivery, were explored to help identify patterns and indicators for further data analysis. While JHU has given overall and site-specific retention rates over time, less is known about what exact services have an impact on retention. That is, does any one service activity or combination of service activities serve as the “hook” for retention? If the family receives that service, does this predict their remaining in services for a longer period of time? Several activities were examined for preliminary trend analysis, including completion of:

- a home visit within 7 days of referral
- more than 1 home visit within the admit month

- a home visit within 7 days of referral and more than 1 home visit within the admit month
- the initial 45-day IFSP
- the 4 month ASQ (Ages and Stages Questionnaire) developmental screen
- the 6 month IFSP (Individual Family Support Plan) review
- the 6 month ASQ developmental screen

A review of Attachment 2, Graphs 1 through 4, indicates that not one of the above resulted in a significant increase in trends of retention rates. The one trend worth further data analysis would be determining statistical significance of the IFSP and correlations with the other service activities. Additional analyses would also indicate whether a true relationship of service activity to retention actually exists or whether retention of those committed to the program is actually impacting completion rates of service activities.

Graph 5 in Attachment 2 looks at retention trends over the last 3 years of the program. Further analysis is needed in order to determine statistical and practical significance. More sophisticated analysis is required to better understand program impact and subsequent policy formulation.

Graphs 6 and 7 in Attachment 2 take a different look at retention. Graph 6 plots out the retention of one cohort of infants entering the program in July 2004 at one month and following them until 11 months old in June 2005. Here 51% remained in the program. Graph 7 plots out the retention for all children by month of age across the program year. That is, total newborns entering at one month of age in July 2004 with discharge rate by month across the program year. Here 53% were discharged.

Graph 8 in Attachment 2 is a preliminary look at the prenatal retention strategy. With just 154 (3% of active enrollment total), the impact of the strategy does not yet appear evident.

Graph 9 in Attachment 2 indicates the pattern of total active enrollment by 3-month age blocks for children in the program during fiscal year 2005. It is important to note that these numbers are duplicated; that is, children are counted more than once in order to track the pattern of enrollment across months. Again, this pattern is consistent

with other information. While the active enrollment is initially high and then drops off up to 12 months, the active enrollment after this point is relatively stable with a considerable percentage staying in the program until age 3 years. Graph 10 looks at this same pattern on a month-by-month basis.

Graph 11 in Attachment 2 represents another distribution of this pattern by age distribution of children discharged throughout the fiscal year. While a total of 66% leave the program sometime during the first year of service, this number drops to just 14% during the second year of service, and then climbs slightly higher to 20% during the third year of service. A total of 14% of all discharges have remained in service a full three years and are discharging due to the child reaching age 3 and “aging out” of service. Graph 12 is another representation of this data and Graph 13 looks at this same pattern on a month-by-month basis.

It is also important to note that these figures are based on total enrollment used as the denominator, a conservative approach, and may also be explored according to other various definitions of service delivery activity. For example, it could be argued that those who discharge within the first three months of enrollment are not engaged and, as such, will not be successfully retained in service. If discharges were analyzed from this point (of more than 3 months of service but less than six months of service), the denominator, and all subsequent percentages reported related to engagement and retention, would differ and present a different indication of program success. Then 49% leave the program sometime during the first year of service, this number drops to just 19% during the second year of service, and then climbs slightly higher to 31% during the third year of service where a total of 21% of all discharges have remained in service a full three years and are discharging due to the child reaching age 3 and “aging out” of service. The data, according to service delivery, has been relatively consistent over the last 3 years. Further, retention rates for FY05 appear to be no better or no worse in comparison to published data for other home visiting programs. However, further analysis is needed to determine the profile of families who discharge by one year of age and those who remain for the full three years. Success should be defined by outcomes such as reduction in risk factors, reduction in family stress factors, establishment of a medical home for the family,

improvement in maternal life course outcomes such as employment, education, and successful transition of families to appropriate services.

Analysis

Low enrollment and retention problems are common among voluntary home visitation programs, and have become a major focus of recent research (McGuigan, Katzev, & Pratt, 2003 ¹ ; McCurdy, Gannon, & Daro, 2003 ²). For example, retention rates in the HFA Arizona program are approximately 56% staying in for at least twelve months, comparable to Hawaii. This preliminary data exploration does not bring forth any new information from that already existing as a result of JHU work. Much is related to how engagement and retention is defined and from what point in time duration in service is counted. As HHS is part of the Early Intervention System, definitions continue to be redefined. Current thinking, as related to OSEP, indicates engagement beginning with completion of the initial 45-day Individual Family Service Plan (IFSP). If the program is truly held as voluntary, then rates of engagement and retention should be given less attention in favor of an emphasis on outcomes achieved by the family, regardless of amount of time spent in the program.

Current Strategies

1. Work with the HS Advisory Task Force in understanding retention trends and to identify further data and reporting needs related to the Child Health Early Intervention Record System (CHEIRS).
2. Work with JHU on more sophisticated evaluation projects and data analysis related to retention and staff training.
3. Work within the DOH EI System to clarify indicators of retention.
4. Explore with families what specific program components are of greatest interest.

¹ McGuigan, W. M., Katzev, A. R., & Pratt, C. C. (2003). Multi-level determinants of retention in a home-visiting child abuse prevention program. *Child Abuse & Neglect*, 27, 363-380.

² ² McCurdy, K., Gannon, R. A., & Daro, D. (2003). Participation patterns in home-based family support programs: Ethnic variations. *Family Relations*, 52, 3-11.

Recommendations

1. Examine and re-evaluate program expectations and definitions of successful outcomes. As long as Hawaii follows the Healthy Families America standard, which espouses that each and every eligible family will voluntarily commit to home visiting services for a full three-year dosage, anything less than that will be considered less than a full success.
2. Open eligibility. If the only window for program entry is 0 to 3 months, the window is limited. Thus, if a family declines service in the infants' first three months of life, then this decision must hold for the next 2 years and 9 months regardless of the situation or the status of the environmental risk. However, in the new contract period, entry into Healthy Start will be through the first year of life (this should address this issue). The program will monitor and evaluate the impact of this policy shift.
3. Review the current system of intensity and frequency of service. According to the current system, a family that does not meet the weekly home visitation schedule is put on a schedule for creative outreach and is most likely dropped from the program. It cannot be assumed that services, per se, are not wanted; it may be more realistic to assume that the schedule of visits is too intense and may not recognize the busy schedules of today's families. The program is considering less frequent, but more focused visit schedules to improve retention.
4. Increase emphasis on prenatal enrollment and monitor rates of retention to determine the effectiveness of this strategy.
5. Monitor rates of retention for the Enhanced Healthy Start program under supplemental contract with Department of Human Services to enroll children age 0 to one year old.

Measures of Effectiveness (2)

There are very few studies that demonstrate the efficacy of home visitation programs for preventing the ultimate outcome, child abuse and neglect. This is due to

several factors: (1) child abuse and neglect are low occurring events, (2) many incidents of child abuse and neglect go unreported, and (3) increased surveillance of participant families through home visitation and linkage to additional community resources may lead to increased reporting for these families. For these reasons, most evaluations of home visitation include a variety of interim indicators believed to be associated with child abuse and neglect.

Findings

HHS has varying indicators of effectiveness.

1. Annual variance report.
 - 98% of at-risk clients and their families enrolled in the program for at least 12 months did not have a confirmed report of child abuse and neglect.

The second and third are both related to compliance with IDEA.

2. Number of developmental screens indicating need for referral and rate of referral for comprehensive developmental evaluation in order to determine eligibility as a child with special health needs.

In FY05 there was a total of 4,632 children in the program.

- 190 (4%) had scores outside the normal range on the developmental screen.
 - 99 (52% of those with scores outside the normal range on the developmental screen) were successfully referred to the EI Section of DOH for a Comprehensive Developmental Evaluation (CDE). Parents may not be consenting to services or accepting the referral to EI.
 - 48 (53% of those referred for CDE) were evaluated.
 - 33 (69% of those referred, 17% of those with scores outside the normal range of the developmental screen, and 1% of unduplicated total children active in the program) were confirmed with developmental delay.
3. Rates of IFSP completion and transition activities required under IDEA from the Early Intervention FY 2005 Focused Monitoring Report (April

2005) with focused monitoring dates of December 1st through December 31st, 2004, Healthy Start results were as follows:

IFSP completed within 45 days	87%
IFSP review w/in 6 months of initial IFSP	65%
Annual IFSP w/in 1 yr. of initial IFSP	61%
Annual IFSP w/in 1 yr of annual IFSP	62%
Follow-up evaluation (for present level of development) completed before annual IFSP	97%
Transition conference held at least 3-6 mos. before 3 rd birthday	47%

Strong > 85% Moderate 70-84% Weak < 70%

4. JHU research findings related to retention.

As discussed earlier, retention has not significantly improved over a ten-year period. Attachment 3 is a presentation given to the Advisory Task Force providing a summary of prevention science and the research and experience gained from the HHS program.

5. HHS data in relation to DHS data.

The most current report (April 22, 2005) from evaluators at the University of Hawai'i-Manoa tracked children born between fiscal years 1993 and 1999 through December 31, 2002. State data for 2000 indicates that HHS children (less than 1 year old) had fewer reports although there was not a statistical difference between those served and those not served. The largest number of reports for HHS children was for threatened harm (abuse and neglect). In addition, the most frequent reporter was "private social service agency". As HHS children are under regular surveillance by program staff who are mandated reporters, this detection bias may account for the increased rates and consequently, the finding of little difference between those served by HHS and those not in rates of confirmed reports.

6. Evaluations of the HHS program by JHU and evaluations of other Healthy Start-like programs done in two (2) other states and Canada can be found in Attachment 5.

Analysis

Evaluation of effectiveness can utilize two methods. One is an assessment of changes in specified outcomes from intake to specified time intervals thereafter and may include medical outcomes, safety outcomes, maternal life course outcomes or risk reduction. Tools exist to ascertain change, including the Family Stress Checklist (FSC) (Murphy, Orkow & Nicola, 1985³) and the Child Abuse Potential Inventory (CAPI). The CAPI was designed primarily as a screening scale for child physical abuse, and is used to document change in physical abuse potential over time (Milner, 1990⁴). HHS currently only utilizes the FSC (as post test) for those families moving from a Level III to a Level IV. This is a very small group; in FY05, just 67 families (n=63) of which 94% had improvement (reduced family stress). Historically, this number has been low as families will often leave the program before the third year of life, which was the estimated time to reach Level IV. With the redefinition of successful discharge being linked to outcomes rather than length of stay, the re-administering of the FSCL will be used as a measurement to document improvement of the malleable risk factors to determine success. This will result in a natural increase in the number of families receiving the FSCL as a post-test.

The second method is the use of a comparison group to evaluate between-group differences in substantiated reports of child abuse and neglect and parental stress. For example, the *Parental Stress Index* (PSI) (Abdin, 1995⁵) is a reliable and validated measure used extensively in research and evaluation. Although the HHS Network of Purchase of Service Providers (POSP) discussed full implementation of the PSI in 2002, it was ultimately decided that only the Clinical Specialist position would utilize this tool as a means of documenting outcomes of those completing treatment readiness (3 months) services. Implementation has been sporadic and, again, this is a very small group; in

³ Murphy, S., Orkow, B., & Nicola, R. M. (1985). Prenatal prediction of child abuse and neglect: A prospective study. *Child Abuse and Neglect*, 9, 225-235.

⁴ Milner, J. (1990). *An interpretive manual for the Child Abuse Potential Inventory*. DeKalb, IL: Psytec.

⁵ Abdin, R. L. (1995). *The parenting stress index*. Odessa, FL: Psychological Assessment Resources.

FY05, just 58 adults (n=51) of which 89% had improvement (reduced parental stress). The ultimate outcomes, abuse and neglect, are measured via data matching of confirmed reports via DHS. HHS has a history of utilizing this type of analysis.

Current Strategies

1. Work with the POSP network to develop a strategic plan of proactive approaches aimed at promoting family wellness and preventing child abuse and neglect, including home visiting, multi-component programs that include educational groups in combination with home visiting, social support groups, and media interventions. These four approaches represent a continuum of targeted to universal programs. The first approach, home visiting, fits with the concept of secondary prevention because it is targeted to a population of children identified *at-risk* for child abuse and neglect; thus, the appropriateness and relevance of HHS. The second approach, multi-component programs, represents a mix of primary and secondary prevention, and the latter two approaches can be classified as primary prevention because they are broadly targeted. One Department alone should not be solely responsible for reducing rates of child abuse and neglect. It is a concerted effort on the part of an interrelated network of community based, private and public agencies. Increased collaboration between the programs funded by the Department of Health and the Department of Human Services will help to foster a systems approach to the prevention of child abuse and neglect.
2. Work with the HS Advisory Task Force in understanding evidence-based and best practice approaches from other programs (for example, Arizona has a statewide program) to restructure program components and refine definitions of program outcomes.
3. Internal planning for short-term contract modifications to concentrate on measurable outcomes more indicative of program impact after the start of the new contract cycle, tentatively scheduled for January 2006. Examples currently under review include:
 - ❖ Improvements in developmental screening scores for children over time.

- ❖ Successful transitions for children and families.
 - ❖ Obtaining or exceeding goals of the IFSP – IFSP development must reflect goal attainment resulting in outcomes measured for target children and families. HHS is partnering closely with another federally funded EI outcomes pilot initiative (the “What Counts” program) looking at family and child outcomes.
 - ❖ Significant improvements in parental stress from entry into the program to six, twelve and eighteen months post entry.
 - ❖ Assessing and improving safety practices in the home at two, six, twelve, and eighteen months post entry.
 - ❖ Improvement in maternal life course outcomes such as employment, education, and the delay of subsequent births.
4. Continue to analyze DHS data in relation to HHS data via contract with JHU.
 5. Engage in more complex and sophisticated data analysis in order to institute decision-making and policy action. JHU is also slated to undertake this activity for MCHB/HHS.

Recommendations

Partner with the HS Advisory Task Force to identify current needs to restructure the HHS program. Act 178/05 states that we are to identify new measures of effectiveness for the Healthy Start program to restructure its program to meet the current needs of the program. What is needed first is a full analysis of program needs. New measures of effectiveness should be identified after the changes to the model have been fully articulated.

Voluntary Nature of the Program (3)

The Home Visiting (HV) component of the HHS Program, fosters family functioning, promotes child health/development, and enhances positive parenting skills for families engaged/retained in service in order to reduce the risk of child maltreatment by addressing the malleable environmental risk factors via information, support, and

linkages to needed community resources. Although every parent clearly could benefit from home visitation support, not every parent necessarily agrees with this finding and, even if they do, may not feel that outside services are warranted, needed, or are of value. This would help account for those parents who do not give consent for their child to be referred to a comprehensive developmental assessment even after the developmental screening information has been reviewed and explained. As long as the program remains voluntary, people can and do decline services at many stages in the program. This is acceptable and allowable within early intervention services as stipulated by IDEA.

The voluntary nature of the program has been a topic of discussion for some time and the necessity of exploring other options, i.e., how to make the program mandatory, is related to the work of the SCR 13 Task Force. In 2003, the Hawai'i Legislature adopted SCR 13. The resolution called for the establishment of a statewide interagency Task Force to develop a plan for better coordination and expansion of services provided through HHS. In January 2004, the Task Force submitted its first report of 26 preliminary recommendations, including development of a data tracking system to enable the review of changes in the system over time. Later that year, the Legislature adopted SCR 45 to extend the Task Force for one year. The second report highlighted the adoption of a Memorandum of Agreement between DOH and the Department of Human Services (DHS) with an agreement to expand HHS eligibility to include families also active with Child Welfare Services Branch (CWS), including increasing the age eligibility for referrals from CWS up to age one and ensuring cross-training of workers in both systems. A pilot project with a multidisciplinary model was established in West and East Hawaii to enable CWS cases to be referred to and to be served by HHS providers. Federal funds of up to an additional \$3.2 million from the Temporary Assistance to Needy Families (TANF) program were earmarked by DHS to expand this enhanced program statewide beginning with fiscal year 2005-2006. These supplemental contracts have not yet been executed due to two protests filed resulting from DOH-HHS Statement of Findings and Determinations and the consequent extensions to current contracts necessary during resolution. (DHS contracts are now being finalized with a start date of November 1, 2005). Once implemented, the Enhanced Healthy Start families will be

required to continue services with the program, or risk being referred back into the Child Welfare program.

It is hoped that after review of the pilot data as well as the full program data (once implemented), further understanding of how this Child Welfare required version of HHS impacts rates of engagement and retention will be more evident. A determination as to whether the voluntary nature of the program should be reevaluated may be premature. Currently there is no plan or infrastructure in place to mandate Healthy Start services for the environmentally at risk, as it is contrary to the voluntary nature of Part C services. Mandating services is a long-term proposal whose consequences must be fully explored. As the Enhanced HS pilot continues, this new data will be reviewed, meanwhile rates of engagement and retention are available for HHS and are directly correlated with the voluntary nature of the program.

Financial Reporting (4)

There are many ways to look at the cost of the HHS. Up until this point in time, there has not been one agreed-upon method for determining cost effectiveness. It is difficult to determine the cost of a preventative program, however consider the cost for a child for whom abuse or neglect has been confirmed. The costs for foster placement, services to encourage re-unification of the family (counseling services, parenting classes, etc.), and costs for those individuals with a history of abuse and neglect currently in mental health treatment programs, incarcerated in prison, and individuals in substance abuse treatment centers can begin to take its toll on any community's resources. Precise projections of cost have been difficult given the chaotic nature of the families served. Again, given that HHS is one of a few statewide programs and is also governed by IDEA, Part C, comparisons are few and far between. Lacking comparisons, calculating cost effectiveness is an on-going challenge.

Findings and Analysis

The first examination of the cost of the HHS program is to review a typical billing invoice for one site on Oahu. .

Typical HHS Monthly Invoice Statement

<i>Cost</i>	
Total for monthly invoice	\$89,545.24
Active Families = 262	
Cost per family	\$ 341.78
<i>Activity- Service bought for cost*</i>	
Number of home visits	222 – less than one per family
Number of outside visits	20 – when combined, still less than one visit per family in this month
Number of attempted home visits (Outreach)	148 – cost to program \$14,268.38
Adding the cost of the attempted home visits/outreach to the cost of the successful home visits increases the cost from \$123.11 to \$219.51	
15 NCAST scales were completed	\$1,854.00
45 ASQ/ASQ-SEs were completed	\$4,761.07
Cost for agency/professional contacts	\$5,853.70
Cost for telephone contacts with family	\$7,258.29
42 families were unresponsive	
44 families were in engagement	
Cost for “outreach”	\$20, 396.97 or \$235.14 per family

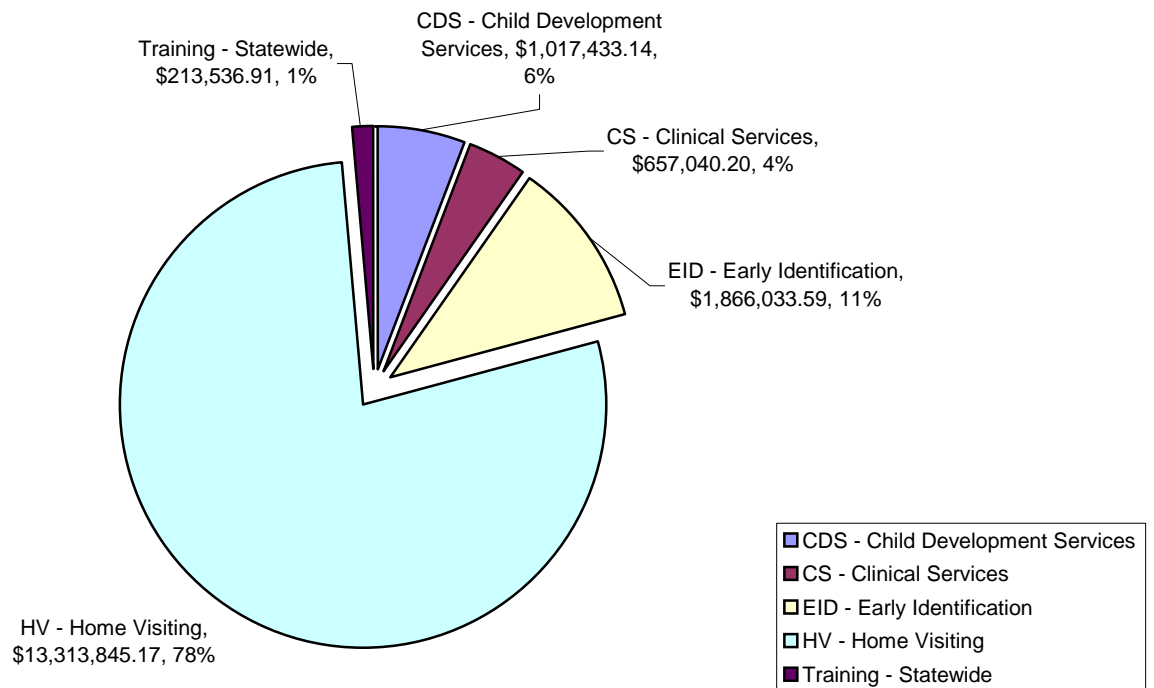
*See Attachment 1 for service definitions and a detailed financial account for each provider.

A second examination of cost of the HHS program is to look at cost per family/child in FY05.

- There were 4,404 unduplicated active families and there were 38,602 visits completed (4% of these were conducted by the CDS). That is an average of 9 visits per family. With expenditures at approximately \$4.7M (home visiting plus outside contact), the cost per family is 1,083.17.
- There were 4,632 unduplicated active children and there were 9,023 developmental screens completed. That is an average of 2 developmental screens

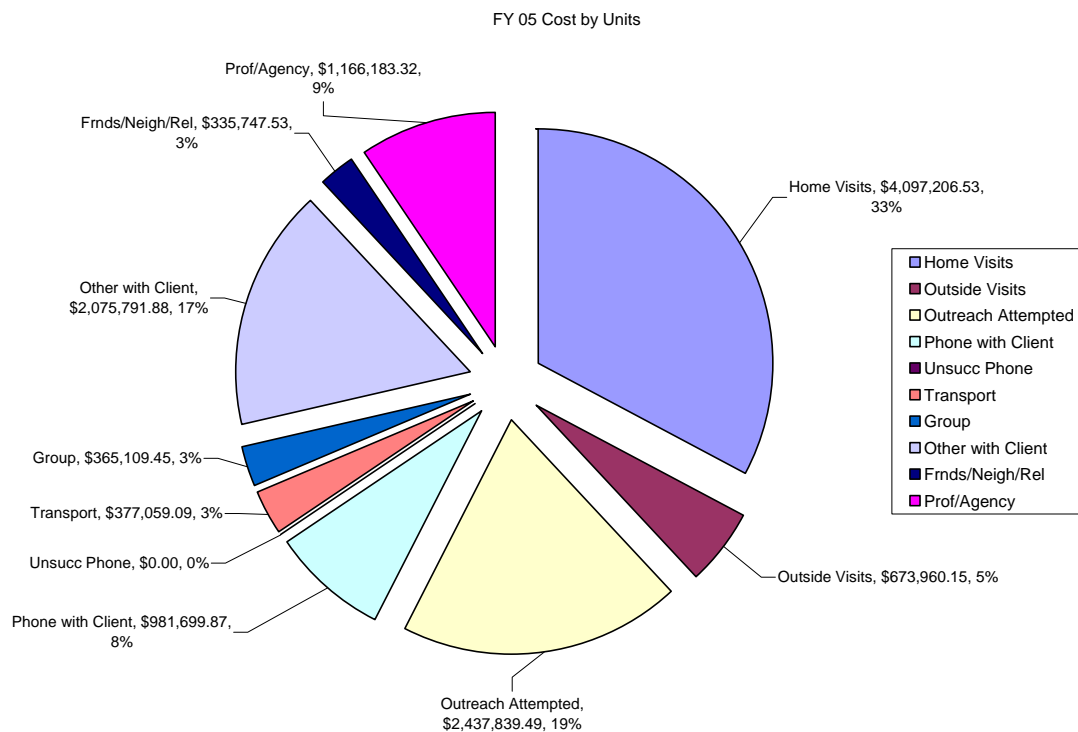
per child. With expenditures at approximately \$810K, this is a cost of \$175.02 per child.

A third examination of cost of the HHS program is to look at a summary of expenditures by overall service in FY05. See attachment 4 for fiscal information.



Data Source: MAS 90 10/12/2005

A fourth examination of cost of the HHS program is to look at overall cost for each service delivery activity in FY05.



Data Source: CHEIRS 10/12/05

Units are multiplied by a service value and then the hourly rate of \$49.44. The service value rates are as follows:

- 2.58 – transportation
- 2.49 – home visits and outside visits
- 2.40 – CDS training staff
- 1.95 – outreach attempted visits
- 1.78 – CDS training families and other contacts
- 1.60 – group contacts
- 1.13 – agency/professional contacts
- 1.08 – relative/friend contacts
- 0.53 – phone contacts
- 0.40 – CDS staff consultations

The interaction between these service activities is being examined for maximum efficacy. Cost effectiveness will be an on-going process. Historically, expenditures are relatively consistent with previous budgets. It is clear that HHS expends much energy and budget in engaging the families into acceptance of services. The emphasis on outreach for the hard to reach families makes sense if the window of enrollment is limited to three months of age, but it is costly. The shift in policy to allow families entry into the program for the first year of life may have an impact on reducing the need for intensive outreach at the front end of the program.

Recommendations

1. With guidance from DOH, develop standards and protocols for cost effectiveness.
2. Develop the infrastructure to align data collection and reporting.
3. Monitor progress and status on a quarterly basis.
4. Reassess the need for intensive outreach services, since the family may re-enter the program through a referral from CW, other provider agencies, or self-referral through the first year of life.
5. Update in the next report.

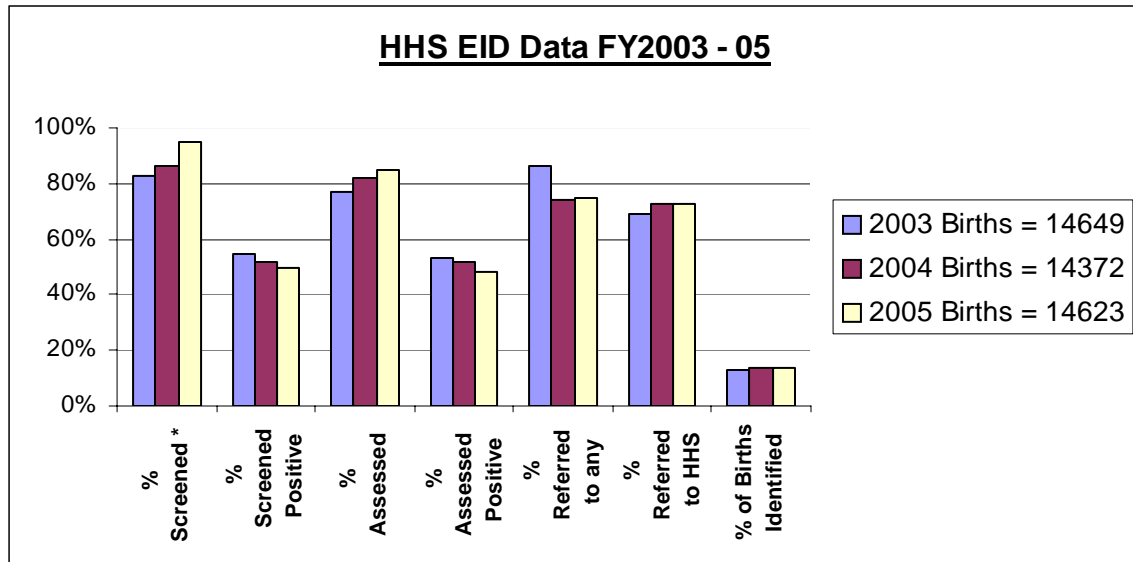
Determining Eligibility via Hospital-Based Universal Screening and Assessment (5)

A second HS program component is Early Identification (EID) for statewide, universal population-based screening/assessment/referral. Eligible families screened and assessed “positive” via application of a risk assessment checklist are offered home visiting services. Those accepting services from Healthy Start are referred to and enrolled into a home visiting program in their residential geographic area.

Findings

In FY 2005 there were approximately 14,623* births statewide. As reported quarterly via the Felix Sustainability Report, the number of births referred to HHS home visiting totaled 1,707 newborns. After complete data entry at the close of the last fiscal year, a total of 2,117 births were entered into the Child Health Early Intervention Record

System (CHEIRS) as referred to home visiting. Of these referrals, 62% (1,320) were on the island of Oah'u.



* Screens of actual births within the Fiscal Year (does not include rescreens and prenatal screens).
Data Source: CHEIRS Report #10 as of October 07, 2005.

Over the last three years rates have remained relatively stable.

Fiscal Year 2005	Number	% of Births	% of Screens	% of Assessments
Screened				
Cost for each screen conducted	13,854	95%		
\$66.72				
Screened +	6,965	47%	50%	
Assessed				
Cost for each assessment conducted	5,946	41%	85%	
\$104.38				
+ Assessment				
Each positive assessment conducted	2,837	19%	20%	48%
is an additional \$102.47				
Accepting referral to any program	2120	14%	15%	75%
Accepting referral to Healthy Start Home Visiting	2069	14%	15%	73%

Data Source: CHEIRS and Felix EID data provided by Contractors on each island for all hospitals statewide.

- ❖ The process cost for identifying, determining, and referring each of those eligible families to any program was \$878.20; given that 2120 accepted a referral into a program.
- ❖ The total amount billed for this service in Fiscal Year 2005 was \$1,860,035.15, or an average of \$155,022.93 per month.

Analysis

As a result of the HHS statewide implementation in 2001, the program has become predominantly dependent on hospital-based referrals, to the exclusion of other relevant and viable sources, including prenatal referrals. Consistent quality improvement meetings between the Purchase of Services Providers (POSP) and Maternal and Child Health Branch (MCHB) have produced qualitative data suggesting that while hospital-based service may be considered focused on a “captive audience”, the environmentally at-risk parent may be less likely to perceive themselves as in need of such services. Not every parent assessed to be environmentally at-risk necessarily acknowledges or agrees with this finding and, even if they do, may not feel that outside services are warranted or needed. This, combined with other outside logistical factors, may negatively impact this process; for example, hospital restrictions limit amount of time for service or access to patients and information restrictions outlined by the Health Insurance Privacy and Protection Act of 1997 (HIPAA) limit access to patient information. Although rates have remained stable over the past three years, the rates may not meet all expectations for 100% screen, assessment, and referral.

A review of the effectiveness of current methods to assess, identify, and offer services to families needing extra support among all civilian birth families in Hawaii is difficult as standards of effectiveness (including cost effectiveness) have not been clearly articulated in Hawaii and do not currently exist elsewhere.

1. This hospital based screening has been the primary referral process since the inception of the program.

2. Very few states operate a statewide, universal population-based screening/assessment/referral protocol so standards of comparison do not exist.
3. Other referral processes have not been fully explored. Other HFA locations rely heavily on prenatal referrals in the absence of a statewide, universal population-based screening/assessment/referral protocol.

Current Strategies

In FY04 the program implemented a quality improvement plan focused on increasing rates of acceptance of referrals to home visiting service including, but not limited to, increased training and supervision, implementation of a script to address common barriers to service, individualization of service options based on particular need and interest, and incentives to families. All of this has had limited, albeit positive, success. Over the past four years, the referral rate has remained stable, averaging 13% of eligible births a year.

To expand referral sources beyond the predominant in-hospital base, the Request for Proposal (RFP) for fiscal years 2006-2009 included a new outcome requiring that a minimum of fifteen percent (15%) of those eligible families referred for screening be prenatal families.

Recommendations

1. Continue to monitor and evaluate the cost effectiveness of early identification via hospital screening and assessment at the time of birth.
2. Increase emphasis on prenatal enrollment.
3. Explore options of widening the window of eligibility beyond birth through 90 days. The Enhanced Healthy Start program contracted through DHS enrolls children ages 0 to 1 year. This would allow more fluidity within the program to give families more time to consider accepting home visiting services.
4. Continue to work with the Task Force to address these issues.

Billing Quality Assurance (6)

The Maternal and Child Health Branch, with support from Family Health Service Division has developed and implemented a strategic plan to improve fiscal accountability within the Healthy Start Program. The measures taken, included:

- Reviewing, updating, and redefining program specialist positions to integrate more fully both program and fiscal monitoring.
- Implementing the use of the MAS 90 accounting system to track fiscal expenditures.
- Making adjustments to the data system, CHEIRS, to improve quality control/quality assurance procedures and reporting.
- Further clarifying the current billing policies and procedures by shortening timeliness for submission.
- Defining and clarifying the Healthy Start contact definitions to improve the unit billing system to respond to the 20% funding reduction in current FY 06 allocations.
- Streamlining contracts (by condensing number of contracts), improving the payment schedule by instituting an open-ended reimbursement schedule, and incorporating DOH specific billing language into each contract to improve the fiscal process/system. This, in conjunction with the new accounting system (MAS90), should ensure that provider billings are appropriate and services were provided accordingly.

Findings and Analysis

Fiscal monitoring occurred late 2004 into early 2005; in a few situations there were indications that multiple billings may have occurred. Investigation revealed that billings were based on a system which allowed billing for a service contact (e.g., home visit) in addition to all other types of contacts (telephone calls, letters) prior to the primary contact/service. A memo was issued to the Healthy Start providers on February 28, 2005 to clarify the acceptable practice of billings for group, individual and outside activities. Since then the Quality Assurance Specialist assumed the responsibility to

review invoices for accuracy until such time that the accountant and contracts specialist are hired.

Recommendations

1. Monitor impact on fiscal accountability and billings on a quarterly basis, reports findings and make adjustments as directed by the Family Health Services Division (FHSD) Chief and the Maternal and Child Health Branch Chief.
2. Revise the HHS billing policy and procedure manual to improve timeliness and accuracy in billing, and to clarify what is an acceptable billing unit within each classification of service delivery. Redefine service contact definitions and revise the billing schedule to ensure that concurrent billings do not occur for a primary type of contact/service. (all prior contact to arrange for the home visit would become inclusive in the reimbursement rate for home a home visit and therefore not acceptable as an additional billable item)

Conclusion

The Healthy Start program has prepared and submitted a detailed report evaluating its delivery of services and specifically focusing on the purchase of services for home visiting services to the best of its ability and according to available data, resources, and staff. The report herein includes findings and recommendations, many of which include the collaboration of the recently created HHS Advisory Task Force, for the overall restructuring of the Healthy Start program and included, but was not limited to, the six points contained on pages 54 and 55 of Act 178/05. In summary, incremental changes are being implemented, which include:

- Increased prenatal referrals in Healthy Start, with a new outcome requirement of fifteen percent (15%) referred prenatally
- Extended window of eligibility from 3 months to 12 months
- Less intensive visitation schedule
- Less child development screening- retaining the critical months of assessment

- Reassessing the definition of program success linking it to family progress as opposed to length of stay until 3 years of age
- Revised training curriculum and adoption of the cognitive appraisal model for home visiting and continued evaluation

However, major restructuring of the Healthy Start program will warrant further data analysis and discussion.

- Retention is difficult for all home visiting programs that are voluntary and there is currently no *one* program model with evidence-based research, or even clear best practice indicators, to guide restructuring in one clear, successful direction. Review of other Healthy Start programs in other states will provide ideas for program improvement. The continued work with Johns Hopkins University will provide an opportunity to evaluate improvement as a result of enhanced home visitor training.
- Cost effectiveness in delivery of services is a priority and continues to be re-examined and revised.

The Hawaii Healthy Start Program continues to be dynamic and responsive to various evaluation results locally and nationally. Any program improvements must be approached from the requirements of today's model which reflects societal and organizational changes as well as mandates forthcoming from OSEP requirements.